

Supporting your child: GCSE Mathematics



2021-2022

MATHS: What is assessed & how?

- ▶ We follow **Edexcel GCSE Mathematics**.
- ▶ Year 11 students will be sitting three 1 hour 30minutes examinations.
- ▶ The first exam paper will be Non-calculator, the second/third will be Calculator.
- ▶ The exam dates are as follows:
 - ▶ **Friday 20th May 2022 – 9am (Non-calculator)**
 - ▶ **Tuesday 7th June 2022 – 9am (Calculator #1)**
 - ▶ **Monday 13th June 2022 – 9am (Calculator #2)**
- ▶ Each exam paper has 80 marks. The total marks is out of 240.

How Will We Help?

- ▶ We have nine maths lessons every two weeks – maths (almost) every day!
- ▶ Pupils will be given homework each week. These must be completed to the best of their ability, so your teacher can give good, useful feedback.
- ▶ We will provide revision materials and guidance leading up to all assessments.
- ▶ Pupils will be working on key maths topics during registration 1-2 times per week
- ▶ We have a paid subscription to MathsWatch – video clips and tutorials to help guide you when you get stuck. This can be downloaded as an app for mobile phones and tablets also.

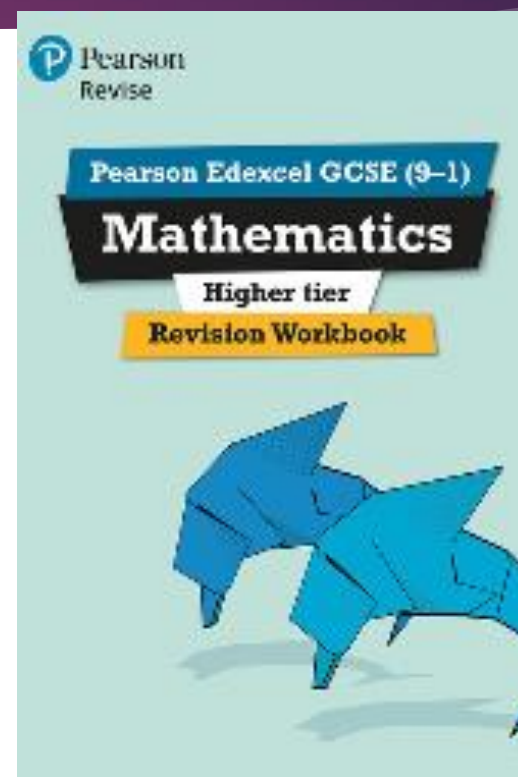
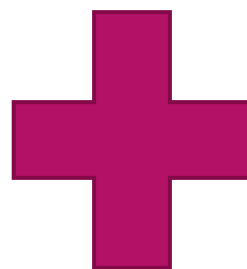
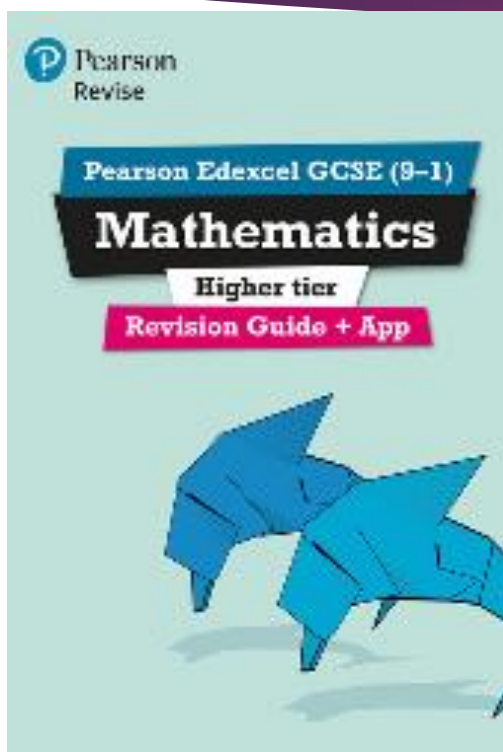
(vle.mathswatch.co.uk)

Log In Instructions: Username: **(your school log-in)@cardinal-heenan** (e.g. 17jonesp@cardinal-heenan)

Password: **(your school log-in)@cardinal-heenan (all lowercase)**

LINK: <https://vle.mathswatch.co.uk/vle/>

Revision guide, app and workbook - £6



Along with: KNOWLEDGE ORGANISERS & ADDITIONAL REVISION BOOKLETS,
distributed throughout the year.

Revision guide – Key features

Worked example

Target grade **6**

(a) Expand and simplify $(3p - 4)^2$ (2 marks)

$$\begin{aligned}(3p - 4)^2 &= (3p - 4)(3p - 4) \\ &= 9p^2 - 12p - 12p + 16 \\ &= 9p^2 - 24p + 16\end{aligned}$$

	3p	-4
3p	9p ²	-12p
-4	-12p	16

(b) Expand and simplify $x(x - 2)(x + 3)$ (2 marks)

$$\begin{aligned}x(x - 2)(x + 3) &= x(x^2 + 3x - 2x - 6) \\ &= x(x^2 + x - 6) \\ &= x^3 + x^2 - 6x\end{aligned}$$

Be careful with the negative signs:
 $-4 \times -4 = 16$ $3p \times -4 = -12p$

Examiners' report

If you have to multiply three factors, don't try to do it all in one step. Expand $(x - 2)(x + 3)$ and write brackets around the whole expansion. Then multiply every term inside the brackets by x .

Check it!

Try an easy value, like $x = 5$
 $x(x - 2)(x + 3) = 5 \times 3 \times 8 = 120$
 $x^3 + x^2 - 6x = 125 + 25 - 30 = 120 \checkmark$

Real students have struggled with questions like this in recent exams – **be prepared!**



KEY FEATURES

- ▶ Worked example
- ▶ Target grade
- ▶ Feedback from examiners
- ▶ Questions to try
- ▶ Video solutions
- ▶ Addition practice in workbook

Now try this

Worked solution video



Target grade **4**

1 Expand and simplify

(a) $(x + 5)(x - 1)$

(2 marks)

(b) $(p - 6)^2$

(2 marks)

Target grade **5**

Target grade **6**

2 Expand and simplify

(a) $x(x + 3)(x + 9)$

(2 marks)

(b) $(n + 5)(n + 3)^2$

(3 marks)

Target grade **7**

$$(n + 5)(n + 3)^2 = n(n + 3)^2 + 5(n + 3)^2$$

Formative/Mock Assessments

- ▶ Formative assessments
 - ▶ Your son will complete formative assessments (two per half term) to identify gaps in knowledge
 - ▶ You will receive a text message to inform you if your son requires additional work on particular topics, and MathsWatch intervention will be set to close the gaps.
- ▶ Mock assessments:
 - ▶ Week commencing 13th December 2021
 - ▶ Week commencing 21st March 2022
 - ▶ Year 11 will sit a full mock of three assessments – one non-calculator, and two calculator exams, all 1 hour 30 minutes each.
 - ▶ Good revision is essential, particularly for topics not studied for a little while. Revision plans will be given and emailed to parents.
- ▶ This will give us an indication of your sons potential GCSE result.

8 week revision plan for MathsWatch

	Number	Algebra	Ratio & Proportion	Geometry & Measures	Probability & Stats	total time of clips (OMGrade)	completed?		
Week 1	Monday	32		48, 49, 50, 54, 55, 56		7 mins	2		
	Tuesday	66, 67, 68, 69	93, 94, 95	105	112	9 mins	3		
	Wednesday								
	Thursday	70, 71, 72, 73, 74	96, 97	106		8 mins	3		
	Friday								
	Saturday								
	Sunday	75, 76, 77	98, 99	107	113	7 mins	3		
Week 2	Monday	78, 79, 80	100, 101		114a/b, 115	8 mins	3		
	Tuesday	81, 82, 83	102, 103, 104			125, 126	8 mins	3	
	Wednesday								
	Thursday	84, 85			116, 117, 118, 119	127a/b	8 mins	3	
	Friday								
	Saturday								
	Sunday	86, 87, 88, 89		108, 109, 110, 111		128, 129	10 mins	3	
Week 3	Monday	90, 91, 92			120, 121, 122, 123, 124	130a/b	10 mins	3	
	Tuesday	131, 132	133		145, 146a/b, 147		7 mins	4	
	Wednesday								
	Thursday		134a/b, 135(a or b)	142, 143	148		6 mins	4	
	Friday								
	Saturday								
	Sunday		136, 137	144	149		4 mins	4	
Week 4	Monday		138, 139, 140, 141			151	5 mins	4	
	Tuesday				150a/b	152, 153	4 mins	4	
	Wednesday								
	Thursday	154, 155, 156		164	165		5 mins	5	
	Friday								
	Saturday								
	Sunday		157, 158, 159a/b		166, 167		6 mins	5	
Week 5	Monday		160, 161, 162, 163			168	5 mins	5	
	Tuesday					169, 170, 171	175	4 mins	5
	Wednesday								
	Thursday				172, 173, 174	176	4 mins	5	
	Friday								
	Saturday								
	Sunday	177	178, 179, 180				4 mins	6	

How Can You Help?

- ▶ Regularly log on to ClassCharts to check for homework which has been set.
- ▶ Log-in to MathsWatch with your son to help him with his homework/revision.
- ▶ Purchase the recommended revision guides:

Edexcel Revision Guide and Edexcel Revision Workbook for a total of £6.

(available for Foundation and Higher level)

- ▶ Help your son to revise thoroughly at the lead up to assessment points to help him prepare fully.
- ▶ Help your son to complete the 8 week study plan of MathsWatch clips, which should be an ongoing revision process, several times per week for 10-20 minutes. Please support your son with this by checking regularly to see progress made on this. This should be repeated a number of times.

Track your sons progress - MathsWatch

My Progress



Topics Watched



Questions Answered



Acquired Skills



Mastered Skills

Search By Video Name



Qualification



Standard

All



Topic

All



Time Period

Academic Year



#	Skill	Video	Last Watched	Views	OMM	Interactive Questions	Last Attempted
A11c		Sequences - Finding the nth Term	18:31 15/9/2021	1	0	0 / <div style="width: 100%; height: 10px; background-color: #ccc;"></div>	
A25		Trial and Improvement - Harder Questions	18:48 15/9/2021	1	0	0 / <div style="width: 100%; height: 10px; background-color: #ccc;"></div>	
A26a		Further Simultaneous Equations - Introduction	18:21 28/9/2021	1	0	10 / 26 <div style="width: 40%; height: 10px; background-color: #ffc107;"></div>	18:31 28/9/2021
A26b		Further Simultaneous Equations - Solving		0	0	24 / 60 <div style="width: 40%; height: 10px; background-color: #ffc107;"></div>	19:32 28/9/2021
A26c		Further Simultaneous Equations - Real-Life Contexts	15:21 2/10/2021	1	0	0 / <div style="width: 100%; height: 10px; background-color: #ccc;"></div>	
A27a	★	Regions - Basics	15:37 2/10/2021	2	0	8 / 8 <div style="width: 100%; height: 10px; background-color: #28a745;"></div>	15:34 2/10/2021

ONMATHS – Free graded practice papers

- ▶ Online practice papers with feedback on areas to improve and videos to help.
- ▶ <https://www.onmaths.com/>

Useful revision websites

Useful revision websites:

- ▶ MathsWatch - <https://vle.mathswatch.co.uk/vle/>
- ▶ Hegarty Maths - <https://www.youtube.com/user/HEGARTYMATHS>
- ▶ OnMaths - <https://www.onmaths.com/>
- ▶ MathsMadeEasy - <https://mathsmadeeasy.co.uk/gcse-maths-revision/>
- ▶ Corbett Maths - <https://corbettmaths.com/>
- ▶ GCSE bitesize - <https://www.bbc.com/bitesize/levels/z98jmp3>